

ELECTRONIC SYSTEM FOR ANALYZING THE RISK OF AN ENTERPRISE

CROSS-REFERENCE TO RELATED APPLICATIONS

This is a divisional application of prior application Ser. No. 11/904,573, filed on Sep. 27, 2007, entitled "Electronic Enterprise Capital Marketplace and Monitoring Apparatus and Method," which is in turn a continuation-in-part of prior application Ser. No. 11/266,572, now U.S. Pat. No. 7,698,188, filed on Nov. 3, 2005, and entitled "Electronic Enterprise Capital Marketplace and Monitoring Apparatus and Method." Such applications are each incorporated herein by reference.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable.

BACKGROUND OF THE INVENTION

The present invention relates to a method and system for the formation of an electronic network-based capital marketplace that facilitates efficient capitalization and liquidation of enterprises by market participants through utilization of enterprise search-and-sort and associated decision support systems. The present invention also relates to an integrated method and system for efficient electronic monitoring of enterprise performance.

Through its enabling role in the capitalization of new and emerging enterprises, the market for private equity and debt capital constitutes an essential pillar of modern capitalism. A lack of integrated process automation and considerable market fragmentation, however, constrain investors' ability to collectively create an efficient market for private capital. A leading study from Harvard University found that "efficient markets do not exist for allocating risk capital to early-stage technology ventures and that serious inadequacies exist in information available to both entrepreneurs and investors." The prevalence of such inefficiencies in a significant capital market like private equity imposes limitations on investors and entrepreneurs alike, but most importantly, these inefficiencies fundamentally limit the efficient, free-market premise of modern capitalism.

Current investor "deal-flow" (i.e., enterprise identification and screening) practices rely largely on fragmented networks of non-stakeholders for prospect identification, and subsequently on manually intensive screening processes for initial qualification of these enterprise prospects (in lieu of the due diligence process). Considerable inherent market fragmentation inhibits efficient matching of enterprise agent and investor agent groups, and manual screening processes employed by investor agents limit their potential rate of enterprise exposure. In addition, these referral networks restrict the velocity of information flow, and hence inhibit the ultimate rate at which capitalization and liquidation decisions are made. For entrepreneurs, poor availability and high costs of capital associated with current practices can restrict their ability to survive and grow. The substantial time and attention demands of current practices distract entrepreneurs from their critical operational responsibilities. For other enterprise agents seeking an enterprise liquidity event, conventional market practices are, in aggregate, ineffective at producing adequate marketplace liquidity.

Once capitalized, the performance of young enterprises is typically monitored by investors to minimize the probability of failure and maximize the investors' return on capital. However, one-third of young enterprises typical fail within three years of capitalization, indicating that investors have in general not implemented an effective systematic method for adequately monitoring the performance of their portfolio enterprises. Studies have determined that around 50% of business failures could have been avoided if related indications of incipient failure had been detected early enough, thereby identifying the need for a systematic method of enterprise performance monitoring and emerging failure detection.

Since the Internet presents an effective communication platform for the sharing of information such as enterprise business plans with potential investor agents, several online entities have established rudimentary network-based platforms for enterprise agents to submit and share their business plans with member investor agents. None of these intermediates, however, have systematically employed process automation that advances and improves the process beyond conventional practices. The only distinguishing feature of these processes beyond conventional investor deal-flow practices is that they have utilized the Internet as a central location for communication between both parties. Since they have failed to introduce procedures and technologies that engender a more efficient process, the industry has been incapable of facilitating an efficient marketplace for private capital.

The risk (i.e., probabilistic uncertainty) associated with the expected fiscal performance of an enterprise asset is comprised of both systematic (economy-based and market-based) risk and unsystematic (firm-based and industry-based) risk. These risk categories are functions of various endogenous (e.g., cash flow management) and exogenous (e.g., interest rates) factors inherent to the enterprise. Enterprises in specific industry sectors exhibit sufficiently similar risk profiles such that specific risk factors are largely consistent in these near-homogenous cross-sections of the enterprise domain. Empirically, studies have determined that certain identifiable enterprise attributes of endogenous and exogenous form exhibit a statistically significant correlation with enterprise risk and can be used as a knowledge reference to compute and predict the risk inherent to a specific enterprise.

Over the years, academic researchers have developed numerous techniques for enterprise failure prediction, including: classical cross-section statistical methods, machine learning decisions trees, neural networks, fuzzy rules-based classification model, multi-logic model, cumulative sum model, dynamic event history analysis, catastrophe theory and chaos theory model, multidimensional scaling, linear goal programming, multi-criteria decision aid approach, rough set analysis, expert systems, and self-organizing maps. Of all these methods, the majority of peer review studies find that conventional multivariate statistical techniques and neural network techniques generally perform best. However, several investigations have found that the performance of neural network techniques is subject to "over-fitting" that may result in an overstated accuracy for the neural network in comparison to the other techniques.

Some techniques for valuing an enterprise have been described in a number of patent applications, including the disclosures of U.S. Pat. Application Publication Nos. 2002/0174081 to Charbonneau et al. and 2004/0024674 and 2004/0128174 to Feldman. While these techniques are asserted to be applicable to private enterprises, they are devoid of any technique for validation and reconciliation of the input consisting of enterprise attributes, which often can be erroneous due to subjective and biased sources of origination (i.e., entre-